

WHAT IS CLAIMED IS:

1 1. A method for treating an infected implant area of a knee joint, the
2 method comprising:
3 surgically accessing the implant area;
4 inserting a tibial component into the tibia using an antibiotic-impregnated
5 material;
6 forming a femoral component that is configured to interact with the tibial
7 component, wherein the femoral component is formed of an antibiotic-impregnated material
8 using a mold;
9 attaching the femoral component to the femur using an antibiotic-impregnated
10 material; and
11 interfacing the tibial component with the femoral component to form a
12 temporary knee joint capable of treating an infection and reducing the spread of infection
13 while permitting movement of the knee joint, and maintaining the knee joint space, thereby
14 reducing scarring and thus facilitating final implantation.

1 2. A method as in claim 1, wherein the tibial component comprises a
2 generally smooth articulating element that interfaces with the femoral component to
3 minimize wear on the femoral component.

1 3. A method as in claim 2, wherein the tibial component is constructed of
2 polyethylene.

1 4. A method as in claim 1, wherein the femoral component is sized and
2 formed while the implant area is accessible.

1 5. A method as in claim 4, wherein the step of forming the femoral
2 component further comprises mixing a bone cement in powder form with at least one
3 powdered antibiotic and adding a liquid activating agent to form the antibiotic-impregnated
4 material.

1 6. A method as in claim 5, wherein the step of forming the femoral
2 component further comprises pressing the antibiotic-impregnated material into the mold to
3 form the antibiotic-impregnated material in the shape of the femoral component and then
4 removing the mold and permitting the femoral component to harden.

1 7. A method as in claim 1, wherein the femoral component is formed into
2 the shape of an articulating femoral prosthesis.

1 8. A method as in claim 1, further comprising re-accessing the implant
2 area after the infection has been treated, removing the femoral and tibial components and
3 inserting a femoral prosthesis and a tibial prosthesis.

1 9. A method as in claim 1, further comprising removing any infected total
2 knee replacement implants after accessing the implant area.

1 10. A method as in claim 1, further comprising trimming the femoral
2 component after removing it from the mold.

1 11. A temporary knee prosthesis, comprising:
2 a femoral component comprising an antibiotic impregnated bone
3 cement that is formed in the shape of a femoral knee joint using a mold, wherein the bone
4 cement is placed into the mold, permitted to harden and then removed from the mold.

1 12. A prosthesis as in claim 11, wherein the bone cement comprises a
2 polymethylmethacrylate material combined with an antibiotic.

1 13. A method for treating an infected implant area of a knee joint, the
2 method comprising:
3 surgically accessing the implant area;
4 removing an infected total knee replacement implants;
5 inserting a tibial component into the tibia using an antibiotic-
6 impregnated material;
7 forming a femoral component that is configured to interact with the
8 tibial component, wherein the femoral component is formed of an antibiotic-impregnated
9 material using a mold while the implant area is accessible;
10 attaching the femoral component to the femur using an antibiotic-
11 impregnated material; and
12 interfacing the tibial component with the femoral component to form a
13 temporary knee joint capable of reducing the spread of infection while permitting movement
14 of the knee joint.

1 14. A method as in claim 13, wherein the tibial component comprises a
2 generally smooth articulating element that interfaces with the femoral component to
3 minimize wear on the femoral component.

1 15. A method as in claim 14, wherein the tibial component is constructed
2 of polyethylene.

1 16. A method as in claim 13, wherein the step of forming the femoral
2 component further comprises mixing a bone cement in powder form with a powdered
3 antibiotic and adding a liquid activating agent to form the antibiotic-impregnated material.

1 17. A method as in claim 16, wherein the step of forming the femoral
2 component further comprises pressing the antibiotic-impregnated material into the mold to
3 form the antibiotic-impregnated material in the shape of the femoral component and then
4 removing the mold and permitting the femoral component to harden.

1 18. A method as in claim 13, wherein the femoral component is formed
2 into the shape of an articulating femoral prosthesis.

1 19. A method as in claim 13, further comprising re-accessing the implant
2 area after the infection has been treated, removing the femoral and tibial components and
3 inserting a permanent revision femoral prosthesis and a tibial prosthesis.

1 20. A method as in claim 13, further comprising trimming the femoral
2 component after removing it from the mold.